Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claim 1 (cancelled)

Claim 2 (previously presented): The method of claim 30, further comprising the following steps:

a) preparing at least one nucleic acid molecule comprising the gene(s) coding for one or several proteins and the control elements necessary for the transcription and the translation of said gene(s),

b) transcribing the nucleic acid molecule(s) prepared at step (a),

c) translating *in vitro* the transcript(s) prepared at step (b),

d) detecting and/or measuring the variation of a known function corresponding to the proteins produced at step (c) in the presence and in the absence of said substance or to the substance in the presence and in the absence of the proteins produced at step (c).

Claim 3 (currently amended): The method of claim 2, wherein preparation of one or several nucleic acid molecules of step (a) consists of placing the gene(s) coding for said protein(s) under the control: of a 5' promoter for transcription and/or~~,~~ of a ribosome binding site upstream of said gene(s) for translation.

Claim 4 (previously presented): The method of claim 3, comprising detecting and/or measuring variation of the known function of the protein(s) produced at step (c).

Claim 5 (previously presented): The method of claim 4, wherein step (a) comprises preparation of the nucleic acid molecule(s) by amplifying the gene(s) coding for said protein(s).

Claim 6 (previously presented): The method of claim 5, wherein step (a) comprises preparing the nucleic acid molecule(s) by PCR or NASBA type amplifying of the gene(s) coding for said protein(s), with the aid of one or several pairs of primers, each one comprising:

(a) some sequence hybridizing upstream of one or several nucleic acid molecules comprising gene(s) coding for said protein(s), and of an RNA polymerase promoter for the sense primer, and

(b) some sequence hybridizing downstream of one or several nucleic acid molecules comprising gene(s) coding for said protein(s) for the antisense primer.

Claims 7-11 (cancelled)

Claim 12 (previously presented): The method of claim 4, wherein said function corresponds to a collection of target proteins of which the genes coding for these proteins are located on the same DNA fragment as in the case of an operon, or at different places of the DNA.

Claim 13 (previously presented): The method of claim 12, wherein step (a) comprises preparing a nucleic acid molecule comprising genes (the operon) coding for the proteins, 5' of the collection of said genes (from the operon) a DNA polymerase promoter, and for each of said genes its natural ribosome binding site.

Claim 14 (currently amended): The method of claim 13, wherein the ribosome binding site of each one of the genes is its natural ribosome binding site and, at step (c), a translation extract is prepared starting from the organism that the target gene(s) come from ~~or from a phylogenetically close organism~~.

Claim 15 (previously presented): The method of claim 12, wherein step (a) comprises preparing one or several nucleic acid molecules comprising the genes coding for the proteins, 5' of each of said genes an RNA polymerase promoter and a ribosome binding site.

Claim 16 (currently amended): The method of claim 15, wherein the ribosome binding site ~~can be~~ is the natural site of each one of the genes ~~or another ribosome binding site more adapted to the translation step (c)~~.

Claim 17 (currently amended): The method of claim 30, wherein said proteins are ~~variants~~ **different mutants** of a protein or ~~variants~~ **different mutants** of a collection of proteins.

Claim 18 (previously presented): The method of claim 2, wherein one of several reporter molecules are added at one of steps (a), (b), (c) or (d) permitting detecting and/or measuring of the activity of the protein(s) produced at step (c) or of the substance.

Claim 19 (currently amended): The method of claim ~~18~~ 2, wherein the reporter molecule is a molecule capable of directly or indirectly revealing the activity of one or several of said proteins or of said substance.

Claim 20 (previously presented): The method of claim 19, wherein the reporter molecule is a protein that is produced during step (c) conjointly with said protein(s).

Claim 21 (currently amended): The method of claim 20, wherein the gene coding for the reporter molecule is placed under the control of transcription and translation regulation sequences ~~similar~~ **corresponding** to those of the gene(s) coding for said protein(s), such that the reporter gene is co-expressed with said gene(s).

Claim 22 (currently amended): The method of claim ~~17~~ 18, wherein said protein or one of said proteins produced at step (c) is also a reporter molecule.

Claim 23 (previously presented): The method of claim 2, further comprising introducing said substance before, after and/or during the transcription and/or translation of steps (b) and/or (c) and/or of detecting and/or of measuring of the variation of at least one known functional step (d).

Claim 24 (currently amended): The method of claim 30 wherein, said substance comprises polynucleotides, peptides, proteins, ions, molecules or natural or synthetic chemical compositions, hormones, aromatic compounds, antibodies, antibody fragments, genes, cellular receptors, amino acids, glycopeptides, lipids, glycolipids, sugars, polysaccharides, antiviruses, inhibitors, or stimulants~~, physico-chemical conditions, radiation, or thermal treatments~~.

Claim 25 (previously presented): The method of claim 2, wherein after step (d), it is verified that said substance does not inhibit one of steps (a) to (c).

Claim 26 (currently amended): A kit for the implementation of the method of claim ~~30~~ 2, wherein said kit comprises: means for revealing the function, an RNA polymerase, nucleotide sequences for the preparation of the nucleic acid molecules comprising the gene(s) permitting the expression of protein(s) corresponding to the detected and/or quantified function, four triphosphate nucleotides, and mixtures necessary for said preparation, ~~to the~~ transcription and ~~to the~~ translation steps.

Claim 27 (currently amended): The kit of claim 26, wherein said kit further comprises:

(a) products necessary for the preparation of the nucleic acid molecules comprising the gene(s) permitting the expression of the protein(s) corresponding to the detected and/or quantified

function, and/or

(b) a support containing: means for revealing a function, an RNA polymerase, four triphosphate nucleotides, **and mixtures necessary for said** transcription and translation **steps** ~~**mixtures**~~.

Claim 28 (cancelled)

Claim 29 (withdrawn): Process for development of new functional tests characterized in that it comprises the following steps:

a) the preparation of at least one nucleic acid molecule comprising the gene(s) coding for one or several proteins and control elements necessary for the transcription and translation of said gene(s),

b) the transcription of the nucleic acid molecule(s) prepared at step (a),

c) the translation *in vitro* of the transcript(s) prepared at step (b),

d) the detection and/or the measurement of the variation of a known function corresponding to the proteins produced at step (c) in the presence and in the absence of one or several reporter molecule(s).

Claim 30 (previously presented): A method of screening a substance able to modify the known function of one or more proteins comprising the steps of:

(a) producing *in vitro* said proteins

(b) measuring and/or detecting variation of the known function in the presence and in the absence of the substance which is screened.

Claim 31 (previously presented): The method of claim 6, wherein, for the sense primer, the sequence hybridizing upstream of one or several nucleic acid molecules further comprises genes coding for a ribosome binding site.

Claim 32 (previously presented): The method of claim 6, wherein, for the antisense primer, the sequence hybridizing downstream of one or several nucleic acid molecules further comprises genes coding for an RNA polymerase terminator.